#### **REMARKS**

Prior to addressing the substance of the Action, applicants wish to thank the Examiner for the thorough analysis of the prior prosecution of the application, as well as the underlying patent, thereby advancing prosecution of the same.

In response to the outstanding Official Action, applicants provide the following remarks.

### 1. Drawings

The Examiner requires a corrected drawing showing the correction filed on September 27, 2000, including a legend identifying the drawing as having been "Amended". A corrected drawing including the proper legend is enclosed as an attachment following the signature page hereof.

### 2. Specification

The Examiner requires a corrected copy of page 1 of the application, in which the Title is shown relative to any correction by Certificate of Correction dated May 23, 2003. Reconsideration of the requirement is requested, as no such Certificate has been filed.

It is noted, however, that a Certificate of Correction was filed May 23, 2000. Accordingly, in a second attachment provided herewith, applicants provide a substitute page 1 for the specification, meeting the requirements set forth by the Examiner.

## 3. Reissue Declaration

The Examiner states that the first error relied upon is not identified with sufficient particularity, and that the second error relied upon is factually flawed. The Action thus requires submission of a further Declaration.

Applicants traverse the requirement as follows.

It is respectfully submitted that the assertion as to the <u>first error</u> is erroneous ant that the assertion as to the second error should be reconsidered and withdrawn, in view of the following remarks. Upon reconsideration, if it is again asserted that changes are necessary in the Declaration, applicants will submit a further Supplemental Declaration. However, it is courteously submitted that, upon consideration of the following remarks, the requirement will be withdrawn and, thus, that it is not necessary to provide a revised Declaration at this time.

In stating that the Declaration fails to identify the first error with sufficient particularity, it is respectfully submitted that the action overlooks the averments made in the final paragraph of page 1 of the Declaration, in the seven paragraphs of page 2 thereof, and in the first two full paragraphs of page 3 of the Declaration.

Therein, applicants specifically identify <u>specific features</u> of the invention which were omitted from the claims and, as suggested, do so without reproducing the claims. For example, applicants declare "that the claims should have been more broadly directed to a more fundamental feature of the invention, based on relationships of the numerical apertures NA of the compound objective lens and the positions of at least two kinds of focal points to be focused, as illustrated by thicknesses T1 and T2 of two kinds of optical disks." Towards that end, the

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declaration states, in the first two full paragraphs of page 3 of the Declaration, that "during the prosecution of the issued patent, Applicants failed to submit a claim directly including the above limitations of 'NA1 is not equal to NA2' and 'T1 is not equal to T2".

Such limitations are provided in new claim 133, and (explicitly or implicitly) in various of the other claims added in the present Reissue Application.

Similarly, applicants state "that, in one particular mode of the invention, NA1>NA2 and T1<T2" and now provide recitation of the same in various claims.

It is accordingly submitted that (at least) one error has been clearly identified in the Declaration.

In asserting that the <u>second error</u> is factually flawed, the Examiner appears to state that claims 154, 173, 234 and 210 were not linked to the elected claims.

This assertion is believed erroneous in view of the admitted statement of the prior Examiner (noted at page 6 of the present action) that claim 120 linked the inventions of groups I-VII.

It is submitted that any amendments made to claim 120 did not alter such linkage.

Therefore, although the indication of linkage was, indeed, related to the *then--present scope* of claim 120, the Examiner has not provided any reason why such linkage is no longer applicable. Therefore, applicants believe that the noted linkage was applicable to amended claim 120 and, under such circumstances, the second error noted in the Declaration is relevant to the present Reissue

Application. More particularly, as claim 120 (even as amended) is believed to link the elected group 1 to groups II-VII, it is therefore correct to assert that claim 154, which linked groups II and IV (each included in groups II-VII) is linked to claim 120. Similarly, claims 173 and 234, which linked groups V, VI and VII, (each included in groups II-VII) are linked to claim 120. Finally, to the extent that claim 210 is not patentably distinct from groups V, VI or VII (each included in groups II-VII), this claim also recites subject matter not patentably distinct from (therefore examinable with) subject matter which is linked to claim 120.

As to the Examiner's observation in the second full paragraph of page 6, it is noted that applicants had provided directions to their attorney at that time to retain the noted claims and to cancel other claims. However, through error without deceptive intent, these claims were cancelled irrespective of applicants' directions.

It is therefore submitted that the second error is factually correct and that no revision of the Declaration is necessary in that regard.

As to the statement that it is not entirely the case that various additional claims would have been examined and allowed upon finding issued claim 1 allowable, the Examiner states that claims 154 and 173 lacked the limitations of claim 120 that led to its issue. It is respectfully submitted, however, that whether or not additional limitations were included in claims 154 and 173, these claims would at least have been examined with claim 120. Applicants believe that these claims would have been allowed and have so declared. Nonetheless, it is submitted that even if the noted claims were thus broader (in some respect) than claim 120,

It is therefore submitted that even if the noted claims were broader (in some respect) than claim 120, inadvertent cancellation resulted in issuance of a patent claiming less than applicants could have claimed thus supporting a broadening reissue including such broader claims.

Accordingly, it is submitted that the Supplemental Declaration properly identifies a correctable error and supports a broadening reissue which reintroduces claims that, at least initially, were linked to a claim that ultimately issued and which, but for inadvertent cancellation, should have been examined in the original application.

In any case, as only one error identification is needed, it is submitted that the Declaration clearly identifies such an error in the first noted error as well as in the second noted error. Therefore, reconsideration and withdrawal of the rejection under 35 USC §251 is believed in order and the same is courteously requested.

## 4. Recapture

Applicants note with appreciation the Examiner's detailed analysis of prosecution history at pages 7-15 of the Action in support of an assertion of "improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based." However, it is courteously submitted that the assertion is erroneous, for the following reasons.

The Examiner correctly notes several remarks made by applicants with respect to amendment of claim 120.

It is respectfully submitted, however, that the assertion of recapture appears to be based on what applicants *did not* state, rather than what they stated.

That is, in the final paragraph of page 9 of the Action, the Examiner correctly observes that claims 133, 154 and 157 are narrower in some respects and broader in others than original claim 137 and, as such, are considered to be broadening claims. However, in the paragraph bridging pages 10-11, the Examiner states that applicants "never argued that claims 121, 136, and 137 further distinguished over the prior art for their respective features... [and thus] effectively canceled the broader recitation of ... [a] broader aspect now presented" in various of the pending claims.

Applicants respectfully submit that, if nothing else, at the very least the Examiner's statement demonstrates applicants' failure to recognize the significance of the broader aspect of the invention, thus supporting the essence of a reissue application for broadened claims. Moreover, while it may be reasonable to argue that applicants surrendered a broader scope of claim 120, the prosecution history does not support such surrender for claims which add other limitations to that claim.

Indeed, a statement was made that the rejected claims are parented by claim 120 and are thus patentable for reasons discussed in connection with patentability of claim 120. Such a statement is undeniable, and clearly expedites prosecution.

However, the Examiner's reliance on lack of further argument for patentability of these claims to support surrender is tantamount to a requirement

for never ending arguments for patentability of dependent claims during prosecution, at the risk of permanent loss of *opportunity* to demonstrate patentability of the subject matter of the dependent claims. It is not argued herein that, because of patentability of claim 120, a broadened claim 11 or 14 is necessarily patentable because of the limitations therein. Rather, it is submitted that, as in any patent application, applicants are permitted to present claim 14 in broadened form, in light of its added limitations which applicants believe to be patentable.

Given the opportunity to prosecute the same, applicants believe that the broadened claims will be shown to be patentable over the prior art, whether or not applicants recognized that fact when prosecuting the original patent. This is the essence of a correctable error curable by broadening reissue.

If applicants had fully recognized such patentability at the time of earlier prosecution, they would have presented the claims in the present, broader, form and would thus have broadened the scope of their patent claims years earlier.

In other words, there is no basis for relying on what applicants did *not* argue to demonstrate recapture, since recapture relates to surrendered subject matter and nothing in the Action has provided any *positive statement* that such a surrender was applicants' intent.

If applicants were attempting to recapture surrendered scope of amended claim 120, without introduction of further limitations, the Examiner's position might be considered persuasive. However, when referring to dependent claims, it

is courteously submitted that broadening by removal of limitations in a parent claim does not constitute recapture.

The Examiner is courteously referred to *In Re Michael P. Doyle*, (CAFC 01-1439, 2002) wherein the court noted with approval the holding of the Board of Patent Appeals and Interferences with respect to recapture. More specifically, the Board had held that

"the recapture doctrine, which prevents an applicant from recapturing through reissue matter surrendered to overcome a rejection based on prior art, is inapplicable here because the pertinent claims were not cancelled to overcome prior art."

As in *Doyle*, the recapture doctrine is inapplicable in the present instance, because the pertinent claims were not cancelled to overcome prior art.

It is particularly noted, for example with respect to claim 133, that claim includes structural limitations not found in issued claims 1 or 14. These limitations relate to a region of the lens, being divided into a plurality of regions depending on differences in distance from an optical axis of the lens, and on optimization of the first and second regions. The optimization is recited as operative to provide different numerical apertures (corresponding to a limitation of issued claim 14) to produce focal points at different distances from the surfaces of two layers (according to a limitation of claim 1).

Thus, the newly submitted claims, while providing *broadening* recitations for purposes of reissue, are *not* claims which are *literally* broader than the issued claims by virtue of incorporation of additional limitations.

In other words, as held by the Board and affirmed by the Federal Circuit, the newly submitted claim was "not cancelled to overcome prior art" and, thus, rejecting the same under 35 USC §251 as recapturing surrendered subject matter is improper. Similar remarks are applicable to the other claims rejected under this ground, and reconsideration and withdrawal of this ground for rejection is thus in order.

#### 5. 35 USC 112

The Examiner rejects claim 33 as being indefinite. It is believed that amended claim 33 is free from any indefiniteness.

Accordingly, reconsideration and withdrawal of the rejection under 35 USC 112 is in order.

## 6. Rejection under 35 USC 102 over Ono et al. USP 4,945,529

Applicants courteously traverse, and request reconsideration of, the rejections under 35 USC 102, for reasons set forth below.

As noted in prior prosecution, the inventive lens recited both in issued claim 14 and in new claim 133 has different (unequal) numerical apertures (NA1 and NA2) for light converged to different focal points which are at different distances (T1 and T2 which are recited as being not equal to each other), and which are also recited relative to the surfaces of two layers.

Thus, the compound objective lens of the invention includes a plurality of regions which are optimized so that the lens has a plurality of numerical apertures for at least two kinds of layers, of thicknesses T1 and T2. Accordingly, linking

claim 133 sets forth the relationships of the numerical apertures NA1 and NA2 of the compound objective lens and the positions of at least two focal points which, in practical applications, may relate to thicknesses T1 and T2 of two optical disks, for example.

A lens according to the recitation of claim 133 results from applicants' determination that different (unequal) numerical apertures NA1 and NA2 should be provided in one optical lens so as to make focusing at plural focal points at different distances possible, and that such different numerical apertures are to be provided by two regions, both of which are optimized to provide the same.

When considered in detail, the recitation of claim 133 that

"both of the first region and the second region being optimized so that the lens has a numerical aperture NA1 (NA1 is not equal to NA2) to produce a focal point through a first layer on an information plane placed at a distance T1 (T1 is not equal to T2) from the surface of the first layer"

permits applicants' inventive lens to be used in conjunction with an optical disk having different information recording planes of different thickness, to provide focal points at different distances therefrom.

However, it is courteously submitted that the Ono et al. '529 reference neither teaches nor suggests the optimization of both the first and second regions in terms of the different thicknesses (i.e., distances T1 and T2), sot that it is considered difficult for the optical head of Ono et al to cope with an optical disk having different information recording planes of different thickness.

Indeed, from the disclosure at col. 9, line 65 through col. 10, line 18 of the reference, it appears that the teaching thereof is that, while there may occur "a variation in a point at which each diffracted beam arrives on the light receiving surface" because of variation in wavelength of the coherent beam, the reference dismisses the same, noting that "No problem, however, arises provided that the point moves parallel to the main partition line." In other words, though such variation in "arrival" points may occur and may be viewed as problematic, steps may be taken to avoid such a problem.

Thus, this portion of the reference appears to *teach away* from the concept of taking steps, by optimization of regions of the lens, to deliberately provide two different focal points so as to focus on different information recording planes of an optical medium.

On the other hand, referring to Fig. 10 therein, the '529 reference discloses that first and second main foci 81 and 82 may be provided on reference planes "remoter from" and "nearer to the diffraction grating 75 than the light receiving surface" of the optical detector assembly 45 (col. 11, lines 58, 61-62).

However, nowhere does the reference teach or suggest optimizing regions of the lens to correspond to different thicknesses of the optical disk 41 in order to focus light at such nonexistent different thicknesses. Thus, the description of "additional points" 76 and 77 of Fig. 4 (beginning at col. 8, line 49) seems to be still further removed from this concept.

Indeed, discussion of focussing of the converging beam refers to focussing on the record surface 42 of Fig. 5, and reference to focussing at a distance therefrom is perceived as *error*, such as "the converging beam is *incorrectly focussed* beyond the record surface 42" (col. 9, line 35). Similarly, focussing in front of the record surface is "focussing error" (col. 9, lines 40-41, 46).

While the embodiment of Fig. 15 of the reference identifies foci 81 and 82 as "main foci" (col. 13, line 64) as "nearer to and farther from the diffraction grating 75" than the optical detectors 66-69, such displacement is not provided for focal points relative to thickness of layers on the recording medium, or with reference to numerical apertures of the lens.

Accordingly, inasmuch as the Ono et al. reference discloses only "desiredly focussing" of a light beam on a surface (col. 15, line 60), and to distortion or astigmatism as causing focussing beyond or in front of the recording surface (col. 16, lines 4-6), it is respectfully submitted that the reference fails to meet each and every one of the limitations set forth in claim 133, which require optimization of regions of the lens to provide particular unequal numerical apertures so as to focus on two different information planes.

Addressing the Examiner's observation that a recording medium "can be arranged" in the reference so as to meet applicants' recitation, it is courteously submitted that rejection under 35 USC 102 requires a reference to disclose each of the recitations of the rejected claim. Thus, it is not what "can be" done which supports such a rejection but, instead, what the reference teaches should be done.

As the '529 reference fails to teach provision of two numerical apertures to produce two focal points at different distances, the Ono reference does not support the rejection.

The Action asserts that the recitation "is related to structure not part of the claimed combination", it is courteously submitted that whether or not the first and second layers are part of the recited objective lens, the recited functionality provides a structural constraint which differentiates the invention from the prior art. That is, production of focal points at different distances by providing different numerical apertures in regions of the lens is well recited in accordance with 35 USC112 ¶6. The statute provides that:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

In the present instance, claim 133 for example recites a specified function to be performed by the recited structure, and whether or not the Examiner considers the claim as reciting particular structure or material (such as the layers) in support thereof, the function performed thereby is clearly set forth, as hereinabove noted.

An Examiner is not free to ignore the language of a claim and its significance. In the present instance, the Action appears to ignore the recitation of useful function in the claim, and further states that structure set forth in the claim but not part of the claimed combination "can be" arranged as recited by applicants,

although no prior art support of that assertion is provided. Such a statement, in addition to ignoring the recitation in consideration of patentability, in addition to ignoring the proper functional recitation provided pursuant to 35 USC 112 ¶6, in addition to hypothesizing on what "can be" done and in addition to failure to provide supporting prior art (and thus changing the grounds for rejection to 35 USC 103), moreover clearly relies on *applicants' own teaching* as a basis for suggesting that "a recording medium can be arranged with the layers and thicknesses in the recited relation".

In other words, the rejection suffers from improper hindsight reliance on applicants' teaching to reject the claims.

Therefore, the '529 reference fails to support a rejection of claim 133 under 35 USC 102, as such a rejection requires a reference which teaches each of the limitations of a claim so rejected.

Reconsideration and withdrawal of the rejection under 35 USC 102 is thus in order, and the same is courteously solicited.

## 6. Request for Clarification

In the Action, the Examiner notes allowability of claims 1-32 and 34-85 subject to overcoming the rejection under 35 USC §251. In view of the foregoing, it is courteously submitted that upon reconsideration and withdrawal of that rejection, claims 1-32 and 34-85 are in condition for allowance.

Additionally, the Examiner states that claim 33 would be allowable upon rewriting to overcome rejection under 35 USC §112 ¶2. As this has been done, allowance of claim 33 is in order.

Claims 128, 131-134, 136, 137, 139, 140, 142, 144, 145, 148, 154, 156, 157 and 159 are rejected under 35 USC 102 over Ono et al. In view of the foregoing analysis, it is courteously submitted that withdrawal of the rejection under 35 USC 102 is in order and, accordingly, that this set of claims is allowable.

The Examiner further states at page 18 that claims 88, 92, 93, 113, 115, 122, 123, 126, 135, 138, 141, 143, 146, 147, 149-153, 155 and 158 would be allowable if rewritten in independent form. The statement does not identify any conditions to such allowability other than rewriting in independent form. Prior to undertaking such rewriting, and the expense of additional independent claims, however, the following clarification is requested.

At page 7 of the Action the Examiner states that independent claims 133, 154, 157 and claims 88, 92, 93, 113, 115, 122, 123, 126, 128, 131, 132, 134-153, 155, 156, 158 and 159 depending therefrom are rejected under 35 USC 251 as being an improper recapture of subject matter surrendered during prior prosecution. Thus, claims 88, 92, 93, 113, 115, 122, 123, 126, 135, 138, 141, 143, 146, 147, 149-153, 155 and 158 are both rejected and allowable without precondition other than rewriting.

It is not clear whether, and which, claims are intended to be allowable and which are intended to be allowable subject to precondition, particularly

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overcoming rejection. Accordingly, applicants cannot respond any more fully to the Action without further clarification or revision, to correct the inconsistent

statements set forth therein.

The Examiner's cooperation in this regard is courteously requested.

To the extent possible, applicants have fully responded to the pending

Official Action. It is respectfully submitted that, in view of the present remarks, it

will be appreciated that the Declaration filed in February, 2003 is proper, that no

recapture is sought, and that rejection under 35 USC 102 is improper.

Accordingly, it is respectfully submitted that the application is in condition for

allowance and an early indication of the same is courteously solicited. In order to

expedite resolution of any remaining issues and further to expedite passage of the

application to issue, the Examiner is respectfully requested to contact the

undersigned by telephone at the below listed local telephone number if any further

comments, questions or suggestions arise in connection with the application.

Respectfully submitted,

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Date: November 12, 2003

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**Appendix to Response** 

# APPENDIX to AMENDMENT AND REQUEST FOR RECONSIDERATION

Applicants provide herewith the following.

- 1) Amended drawing sheet 4, including changes to Fig. 5 of the drawings, as proposed September 27, 2000, and approved by the Examiner.
- Replacement page 1 of the specification, showing the Title as a correction to the Title provided by a Certificate of Correction filed May 23, 2000.

Respectfully submitted, CLARKA& BRODY

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